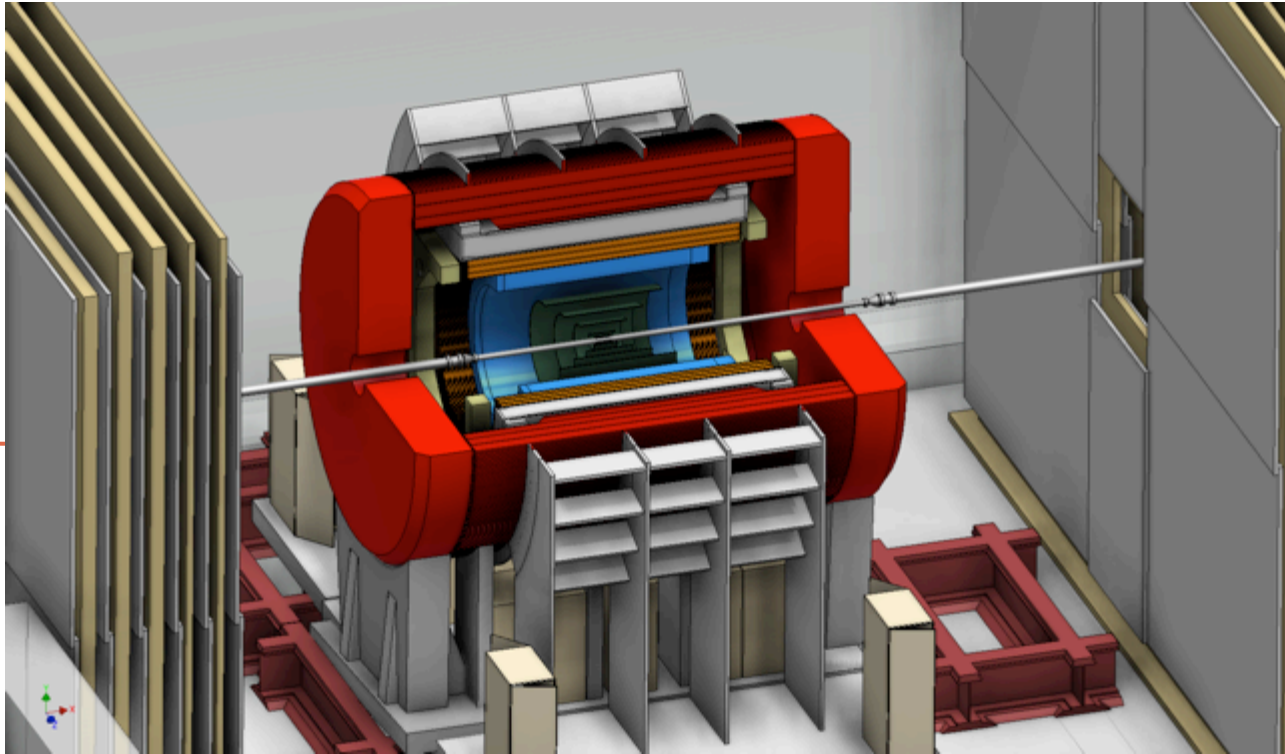


SPHENIX MECHANICAL



D. Lynch
July 10, 2014

AGENDA:

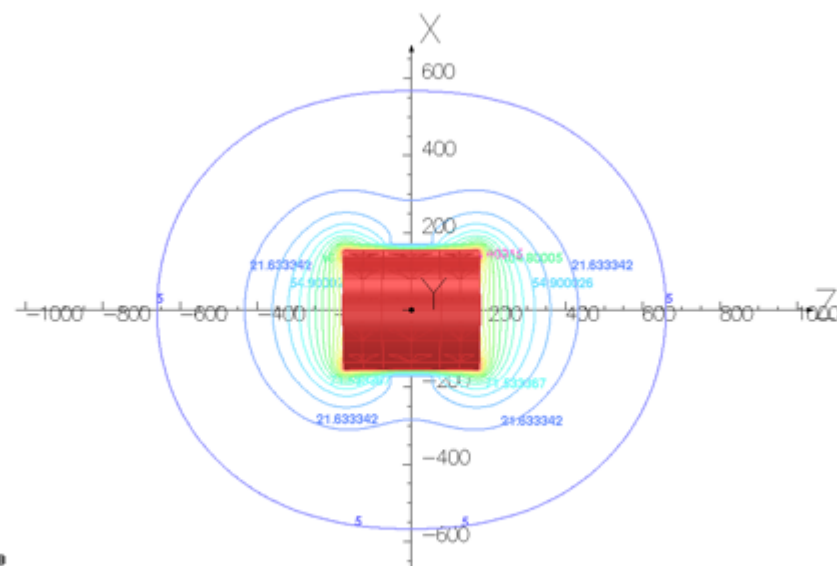
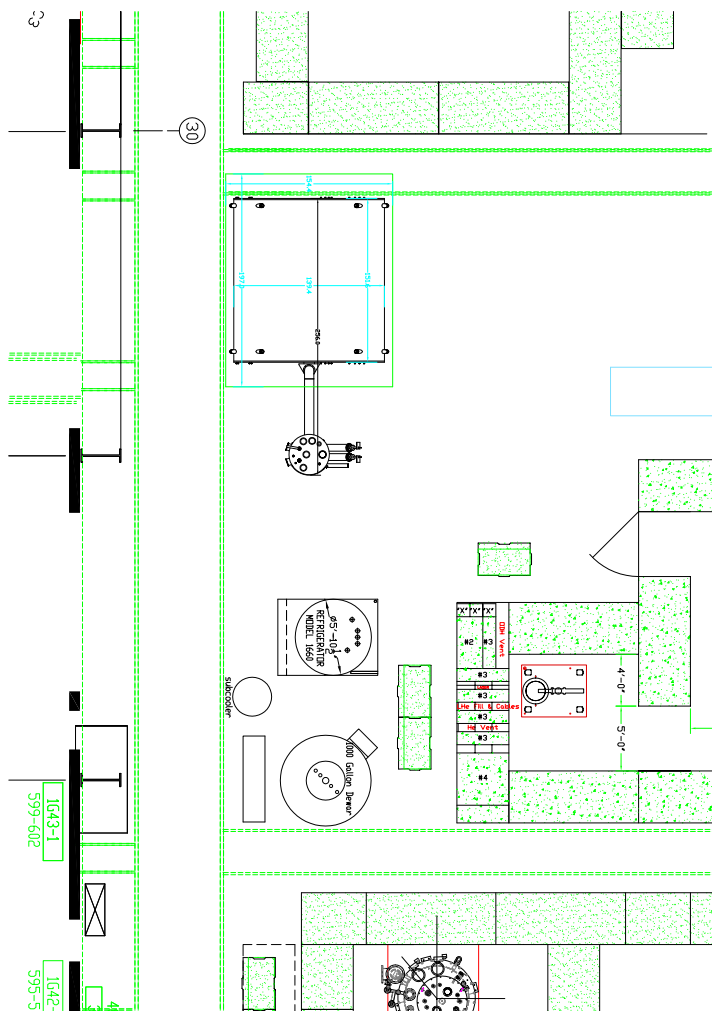
- sPHENIX DOE review last week
- Magnet update
- sPHENIX Design Update
- sPHENIX Infrastructure update
- PHENIX Decommissioning Plan update
- sPHENIX Tasks & Schedule
- AOB

BABAR Magnet Update

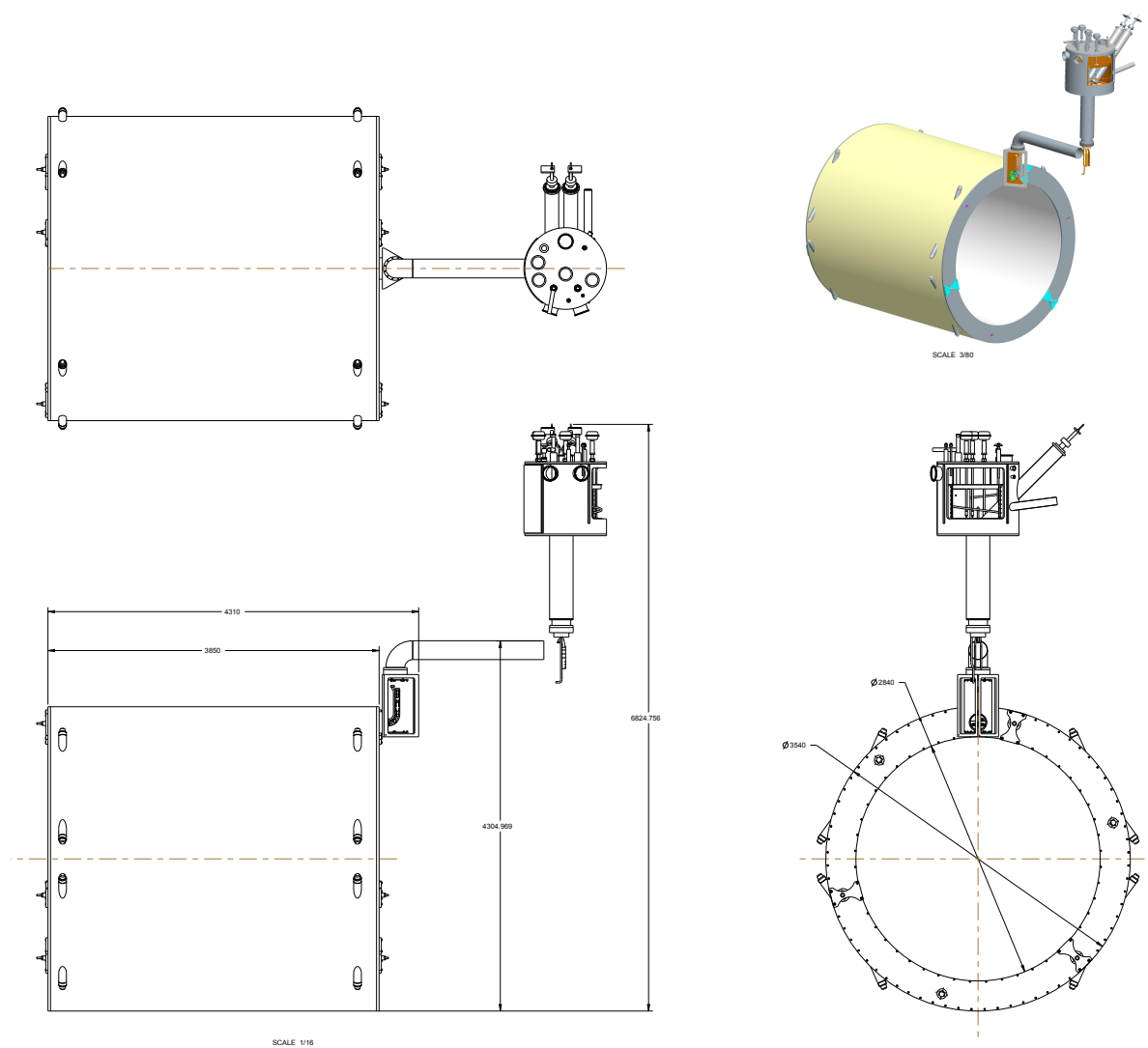
- Meeting yesterday at magnet division
- Shipping fixtures received
- Shipping vendor selected
- Need a transportation and handling review at CAD
- First

DOE Science Review

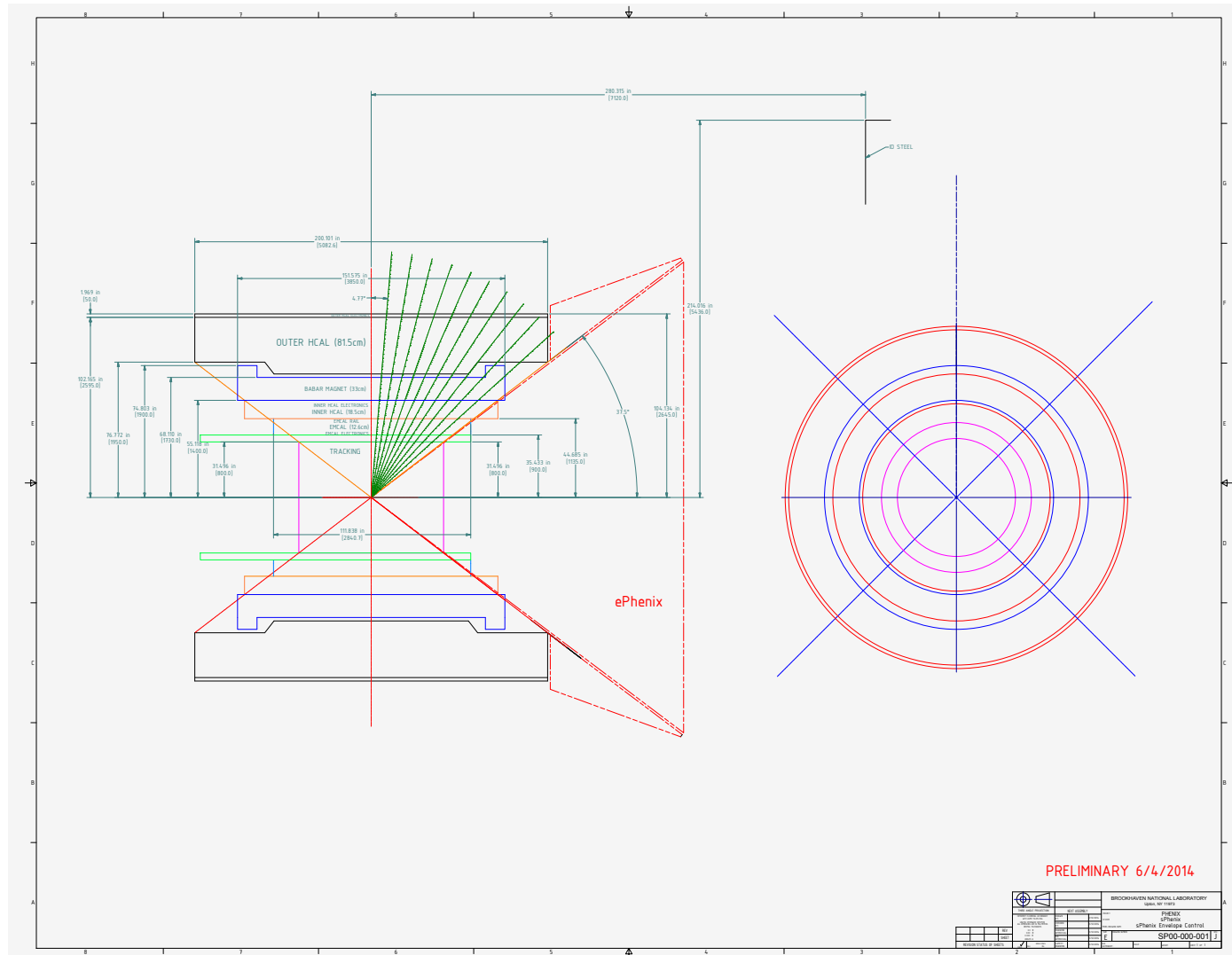
- Draft report is very favorable
- Presentations were well received
- Scientific case accepted
- Some “suggestions”
- Now we move forward
- Need to ramp up our efforts for the next step: “Show us the money!”



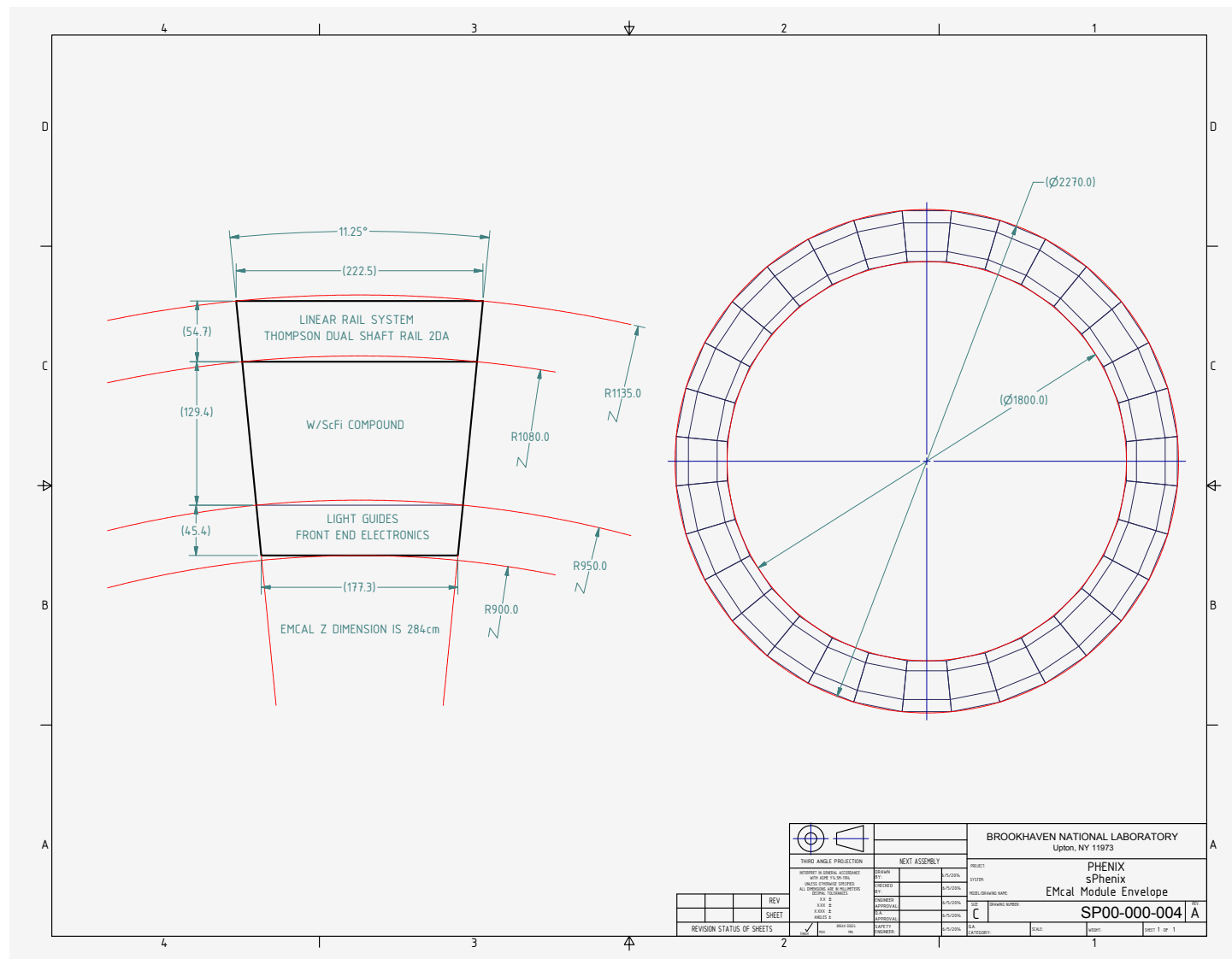
Map contours: 0
5.000000E+00 to 3.210395E+02
Integral = 5.926232E+07

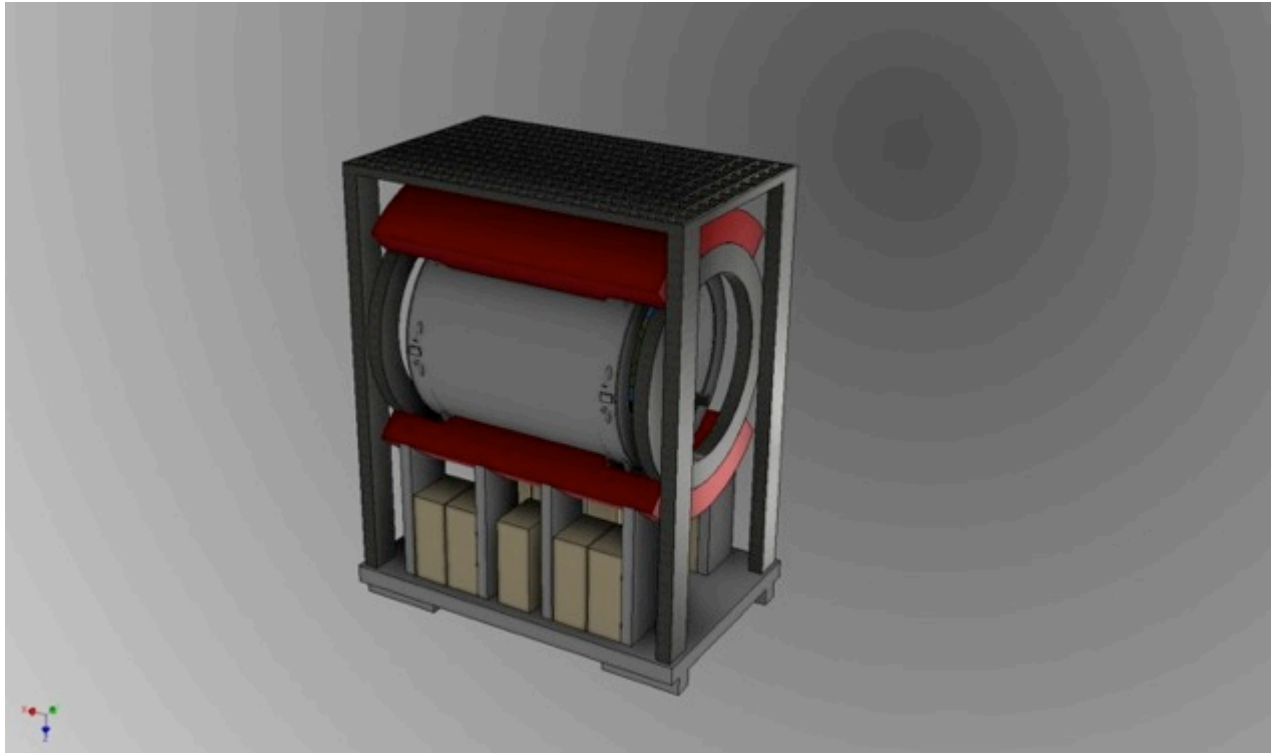


- sPHENIX Design Update: No change to envelope since last meeting



sPHENIX EMCal Envelope

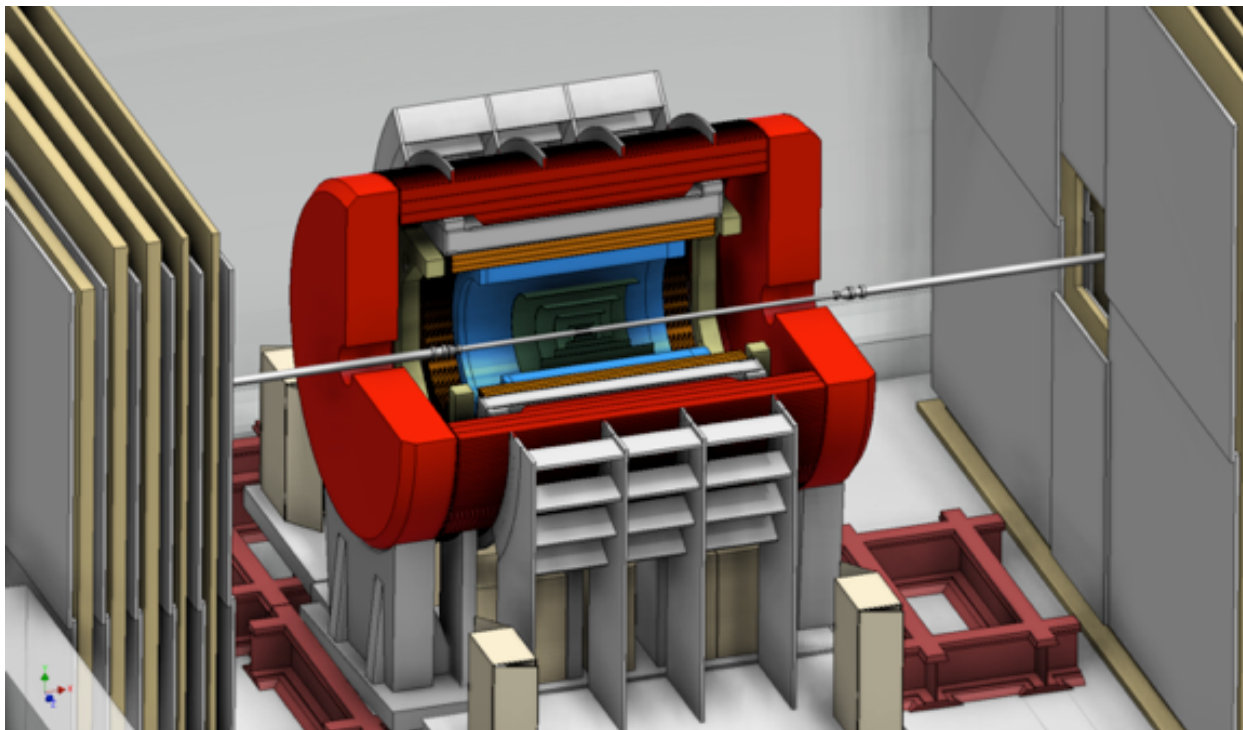




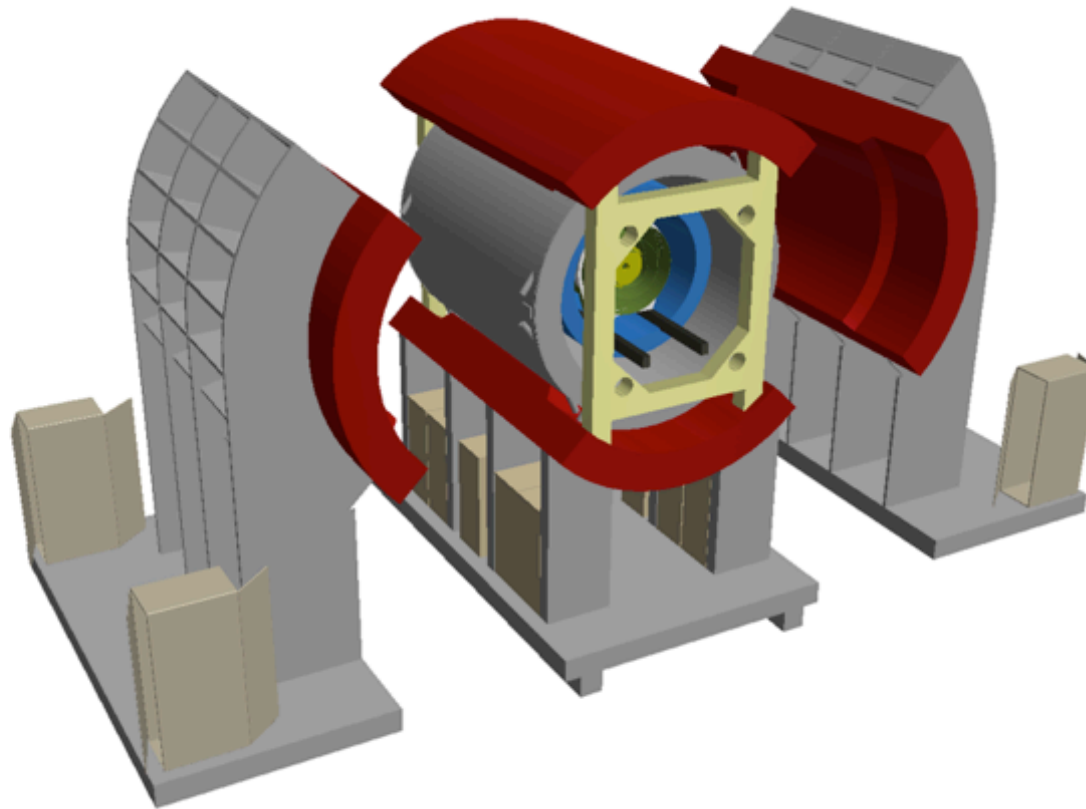
Initial concept for external support,
racks and upper bridge platform

Design efforts over the next few months will include several areas of emphasis:

- (a) incorporating a more detailed flux return (cap) design
- (b) Firm up detector subsystem specifications and design
- (c) Support structure design and analyses
- (d) Infrastructure and support system design and analyses
- (e) Magnet acquisition testing and design of modifications



Basic sPHENIX model cutaway (updated)



sPHENIX open, with racks

sPHENIX Infrastructure update

Infrastructure requirements:

- Gather documentation
- Evaluation
- Re-drawing
- Adaptation
- Maintenance/modification
- New fabrication
- Installation Planning
- Schedule
- Cost

PHENIX Decommissioning Plan update

Installation Procedures, work permits drawings and fixtures:

- Gather documentation
- Evaluation
- Re-drawing
- Adaptation
- Maintenance/re-fabrication
- Re-certification
- Schedule
- Cost

sPHENIX Tasks & Schedule

Major Subsystems/Subtopics:

- Magnet (BABAR) (Magnet Div) 2/1/14 - 12/31/2018
- Hadronic Calorimeter (HCAL) (PHENIX) 2/1/14 - 12/31/2020
- EM Calorimeter EMCal (PHENIX) 2/1/14 - 12/31/2020
- VTX (RIKEN) 2/1/14 - 12/31/2020
- VTX additional layers (RIKEN) ? - 12/31/2020
- Carriage Support structure (PHENIX) 2/1/14 - 12/31/2020
- Readout Electronics (PHENIX) 2/1/14 - 12/31/2020
- Infrastructure (PHENIX, PP) ? - 12/31/2020
- Electrical Power Services (PHENIX) ? - 12/31/2017
- Instrumentation Support ? - 12/31/2020
- Signal Trays & Racks (PHENIX) ? - 12/31/2020
- Cryo Services (CAD) 2/1/14 - 8/1/2018
- Cooling water (CAD) ? - 12/31/2017
- Safety Systems (PHENIX) ? - 12/31/2020
- Work Platforms and Access/Egress Structures (CAD) ? - 12/31/2017
- HVAC (CAD) ? - 12/31/2017
- PHENIX Decommissioning (CAD, PHENIX) ? - 6/30/2017
- System Integration (PHENIX) 2/1/14 - 12/31/2020
- Testing (PHENIX) 2/1/14 - 12/31/2020
- Installation (PHENIX, CAD) 2/1/14 - 12/31/2020
- Commissioning (PHENIX) 2/1/14 - 12/31/2020